

DOCUMENT RESUME

ED 095 678

EC 062 778

AUTHOR Kemper, Gloria; Mathison, Katy
TITLE Perceptual-Motor Assessment for Trainable Mental Retardates. Noble 1.
INSTITUTION Marion County Association for Retarded Children, Indianapolis, Ind.
PUB DATE 72
NOTE 71p.
EDRS PRICE MF-\$0.75 HC-\$3.15 PLUS POSTAGE
DESCRIPTORS Auditory Perception; *Exceptional Child Education; Mentally Handicapped; *Motor Development; *Perceptual Motor Coordination; Psychomotor Skills; *Testing; *Trainable Mentally Handicapped; Visual Perception

ABSTRACT

The manual provides instructions for administering and scoring gross and fine motor assessment procedures for use with trainable mentally handicapped children. It is noted that some assessment items were derived from formal standardized tests. Provided are a program description, general instructions, a list of equipment needed for testing, a program planning form, and suggestions for remediation. Gross motor assessment procedures are given for the following areas: balance, upper extremities, body identification, auditory perception, ocular pursuit, eye hand dominance, imitation of movement, crossing midline of the body, stereognosis, and right left discrimination. Also provided are techniques for assessing the following fine motor abilities: visual discrimination, visual memory, visual fine motor (copy forms), visual fine motor (cutting), visual fine motor (expression of body image), visual fine motor (spatial), visual fine motor (problem solving), auditory sequencing, auditory vocal expression, auditory motor expression, auditory visual color discrimination. Appended are forms and charts to be used in the assessment process. (DB)

ED 095678

PERCEPTUAL-MOTOR ASSESSMENT
FOR
TRAINABLE MENTAL RETARDATE

by

Gloria Kemper, M.S.
Psychometrist
Noble I
Indianapolis, Indiana

Katy Mathison, O.T.R.
Occupational Therapist
Consultant for
Noble I
Indianapolis, Indiana

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Frank J. Ryan, Executive Director
Jack S. Collins, Director of Program Services
Edward F. J. Ryan, Director of Educational Services

Printed by
Marion County Association for Retarded Children
Indianapolis, Indiana

1972

EC 062 778

CONTENTS

PREFACE

PART I — GROSS-MOTOR ASSESSMENT

Program Description, Purpose and Objectives.....	1
General Instructions for Administration and Scoring.....	3
Administration and Scoring	
I. Gross-Motor.....	5
II. Balance.....	5
III. Upper Extremities.....	6
IV. Body Identification.....	7
V. Auditory.....	7
VI. Ocular Pursuit.....	7
VII. Eye-Hand Dominance.....	8
VIII. Imitation of Movement.....	8
IX. Crossing Midline of Body.....	10
X. Stereognosis.....	12
XI. Right-Left Discrimination.....	13
Equipment Needed for Testing.....	14
Program Planning Form.....	16
Remediation and Training.....	18

PART II — FINE-MOTOR ASSESSMENT

Rationale.....	1
Definition of Systems.....	2
General Instructions for Administration and Scoring.....	5
Administration and Scoring	
1. Visual Discrimination.....	6
2. Visual Memory.....	8
3. Visual-Fine Motor, Copying Forms.....	9
4. Visual-Fine Motor, Cutting.....	10
5. Visual-Fine Motor, Expression of Body Image.....	11
6. Visual-Fine Motor, Spatial.....	13
7. Visual-Fine Motor, Problem Solving.....	15
8. Auditory Sequencing.....	17
9. Auditory - Vocal Expression.....	17
10. Auditory - Motor Expression.....	19
11. Auditory - Visual Color Discrimination.....	21
Checklist Materials.....	23
Suggested Station.....	24

APPENDIX

Gross-Motor Assessment Form.....	i
Program Planning Form.....	vii
Position Chart.....	viii
Ocular Pursuit Chart.....	ix
Fine Motor Assessment Form.....	x
Suggested Equipment Lists	
Gross-Motor.....	xi
Fine-Motor.....	xii-xx

PREFACE

On the following pages will be found a perceptual-motor assessment program, including both gross and fine motor evaluation forms. The assessments are geared toward TMRs. Portions of the assessments were derived directly from formally standardized tests (Ayres, Kephart, Binet, etc.). The program description that precedes the two areas explain, in detail, the administration and scoring procedures.

After assessment has been completed training in all areas will be given with special concentration in problem areas (areas that show the greatest amount of deficits).

Because of the type of client that will be assessed it is only natural that many problems are anticipated with scoring and administration. The scoring systems and areas made available for comments have been set up in such a way as to give the administrator a more accurate picture of performance. Test and retest dates will be pre-established, and scores will be compared with the clients' Alpern-Boll Developmental Skill-Age Inventory Test scores.

We are interested in the organization of the interaction of sensory input as such organization contributes to interpreting environmental phenomena such as shape, depth, motion and constancy. We want the child to be able to integrate this perceptual input with his motor output.

A checklist can help us detect faulty organization and integration. When we have determined a child's needs we can present him with appropriately patterned stimuli and require patterned responses so as to facilitate organization. This is the base for a perceptual-motor program.

PART I

GROSS-MOTOR ASSESSMENT

Perceptual-Motor Assessment

Program Description

Program purpose: General Goals:

1. Stimulate normal growth and development through normal experiences.
2. Fill in "gaps" in development.
3. Substitute for deficits—adapt to the environment with what the child has left.
4. Increase awareness of self and environment.
5. Lessen school problems in areas of learning and behavior.

Objectives: To improve:

1. Overall balance
2. Body image, concept, and schema
3. Sensory awareness—auditory, tactile, visual, olfactory
4. Coordination, integration of body functions
5. Socialization
6. Eye contact
7. Attention span
8. Ability to understand and follow directions
9. Awareness of kinesthetic potential
10. Ability to participate in a group situation

Description: This program is set up as a supplement to the classroom training received at Noble Center. The need for such a program is indicated by the behavior and general physical condition exhibited by the children.

The children exhibit such problems as limited or no attention span, little or no eye contact, lack of interest of their environment, difficulty in adjusting to new people and situations, poor balance and coordination, visual and auditory limitations, gross physical handicaps, and numerous behavior problems. All these problem areas seem to be interrelated which in turn accentuate some problems more than others. As a result, the classroom teacher has a multitude of problems with which to cope.

The perceptual-motor program is, therefore, designed to alleviate or lessen these problems. It is hoped that the classroom teachers will be able to carry over some of the activities in the classroom that are included in the perceptual-motor program. Other disciplines are also encouraged to observe and employ the techniques and activities in this program. The concepts and skills taught need to be presented in as many different ways as possible in order to prevent learning splinter skills. Repetition is also needed for the child to learn and use the activity, appropriately and successfully. Provision of perceptual training alone is insufficient. A well-rounded program is needed if the children are to gain from any experience.

The following section describes each area being assessed. The assessment is in no way intended to be a static and unquestionable evaluation. It is merely a guide and rating scale for the program directors and those who are involved in planning the programs to be presented. It will hopefully indicate areas of deficits, strengths, and areas and amount of improvement. Along with the Alpern-Boll Developmental Skill Age Inventory the staff should be able to see what improvements, if any, have been made throughout the year. It will also serve as a guide for establishing realistic goals and helping to plan better classroom lessons. The approach used in teaching can also be adjusted if areas of deficits are more fully understood.

It is assumed that many children will be unable to perform the activities adequately or will not cooperate so that the form can be complete. Completion is not necessary as long as the examiner makes an attempt to complete as many items as possible according to his own professional judgment and knowledge of the child's abilities and disabilities. Some items may be skipped entirely if the examiner so desires. However, the items should be marked accordingly and reason given why it was not formally tested.

General Instructions for Administration and Scoring

Scoring Key:

Key: I-Independent
H-Can do with help
A-Attempted
No-Unable

Comments: willingly attempted activity
imitates
hesitates
needs assistance (kind and amount)
asks for assistance
fearful
refuses to attempt activity

Scoring: The letter code should be placed in the area corresponding to the activity and date of test. Comments need to be given only when child does not perform the activity in a "normal" manner. Keep the comments brief. Use the space provided at the end of the form for detailed explanations and summary of performance. It is necessary to record a comment if the activity is not performed normally so that later evaluations may show improvement or change and sometimes, regression. It is helpful to mention in the summary whether or not the child was cooperative throughout the evaluation session. If at any time the child becomes restless, inattentive or uncooperative, it is a good idea to let him play freely for a short period, get a drink, go to the bathroom, etc., and then return to the test area. In some cases the completion should be accomplished within one school week. Subsequent ratings may be made at the discretion of the examiner. Again, ratings should be completed within a limited time period, ideally one school week.

Whenever an examiner evaluates a child his name should appear below the initial examiner's name and the date of examination.

Dominance may not be established in some children. Therefore, this space should be left blank or filled in with a question mark. If a preference

is noted, record it as such (i.e., L. Preferred?).

Each evaluation session should be started with all materials in the test room. Familiarization with the test materials and test items is suggested, for more accurate scoring and ease of administration.

Some of the items under Gross-Motor and Upper Extremities are geared for the more physically handicapped and the cerebral palsied. Many items can be quickly screened and deleted at a glance for many of the higher functioning children.

For explanation of scoring for the individual sections see the section on "Administration and Scoring."

Hereafter, read Examiner for Ex. or E. Read Subject for S.

Administration and Scoring

I. Gross-Motor

This section assesses the motor abilities of the child. If the examiner is confident that the child can perform certain activities listed or has observed the child performing the same activities in the classroom or during play, he may mark the appropriate area with the correct rating. If there is some question as to performance, it is best to have the child perform the specific activity.

Explanation of specific items:

Supine—position child on his back

Prone—position child on his stomach

Creeping—like a normal baby "crawls"

Drag Crawling—on elbows, head up, legs extended and kicks

Ring Sitting—child sits with legs in front, soles together

Long Sitting—child can sit for more than just a few seconds;
balance being quite good

Side Sitting—child's legs are underneath his body and to one side, knees bent.

II. Balance

(If child does not understand verbal directions, demonstration may be given.)

Standing Balance: Eyes Open (SBO)

Child is asked to stand so that he is not close to walls or furniture that might encourage his use of them to maintain his balance. Child is asked to stand with arms folded, elbows flexed, hands tucked in and held against his chest. Touching child's left leg near foot, examiner says: LIFT THIS FOOT. DON'T HOP OR MOVE AROUND. Stopwatch is started as soon as one foot is lifted and time noted when that foot is placed on the floor again, even momentarily, or hand is extended to gain balance, or child hops or moves foot on which he is standing in order not to lose balance. If child immediately loses balance, apparently because of not

getting balance first before lifting his foot, the test is repeated with the reminder to the child that he get his balance first, before lifting his foot. It is important that a child be given a second chance if the first measurement was not an accurate indication of his standing balance. When child has stood for 180 seconds on a foot, the test is stopped for that foot.

Balancing ability on the left leg is tested in the same manner, with examiner saying: NOW LIFT THE OTHER FOOT. The total number of seconds recorded for both the left and right constitutes the score for the test. The maximal score on the test is 360. The standard score for all ages is found in Table 12 in the Southern California Perceptual Motor Test Manual.

Standing Balance: Eyes Closed (SBC)

The procedure and scoring for this test is identical to that for standing Balance: Eyes Open, with the exception that child is required to keep his eyes closed while balancing on one foot. If child is unable to keep his eyes closed, a shield should be placed before his eyes to prevent any visual stimuli from assisting him in his balance. It is often advisable to let child know that balancing with the eyes closed is much more difficult for all people. The standard scores are found in Table 7 through 11*. As in SBO, this test is terminated when child has stood 180 seconds on either foot, making the maximal possible score 360. It is unlikely that any child will reach the maximal score.

(Information for SBO and SBC is taken directly from A. J. Ayres, Southern California Perceptual Motor Test, 1968. *Table 7 through 11 may be found in So. Calif. test manual.)

III. Upper Extremities

Toys are presented and subject is observed as to manner in which objects

are handled. Verbal cues may be given by examiner after subject has had a chance to examine each object.

IV. Body Identification

Ask the child to point to the body parts indicated on the evaluation form. In order to get a score of "I" the child must point to the part on command without any other type of assistance from the examiner. If time allows and the examiner wishes to do so, he may ask the child to point to other body parts and/or ask what they are used for. If the answers are significant, the information should be included in the summary.

Tactile defensiveness—score, yes or no. This is exhibited by children who do not like to be touched by objects and/or persons. Auditory defensiveness is also present in many children. If either is suspected indicate by a "yes" score.

V. Auditory

Throughout the evaluation the examiner should take note of the child's awareness and response to auditory stimulation. "Yes" or "No" should be used for scoring along with appropriate comments. If diagnosis of deafness is confirmed this should be indicated on the face sheet of the evaluation form. One level command—no more than one specific direction is given at one time.

VI. Ocular Pursuit

Hold bell on string 12 inches long. Begin with bell one foot in front of plane of face and one foot to Ex's left of child's midline. Move in direction of arrows, shown on score sheet, saying, "Watch the bell, keep your head still." If necessary, gently hold child's chin to prevent head moving. After diagram has been followed, take bell to within 6 inches of eyes. While there, ask child to look at you, then back at the

bell. Then move bell three feet from child's face. Check items on score sheet successfully accomplished, and repeat pursuits if necessary to check any uncertain items. This test also reflects distractibility. Score is total number of checks. Estimated norms are: 5 yrs. 5-9; 6 yrs. 6-10; 7 yrs. 7-10. (See Appendix for ocular pursuit chart)
(Taken from A. J. Ayres, Perceptual-Motor Test Battery, 1964)

VII. Eye and Hand Dominance

Sit opposite child, placing objects directly in front of child. When testing eyes by looking through objects (such as Kaleidoscope) object should either be held by both of child's hands, or held by Ex who places object at midline allowing child to choose eye by moving head so one eye is in front of object. The number of feet between child's eyes and that at which he is looking is indicated on each item. Begin test by saying "I want to see how quickly you can look at things." Do not tell child that dominance is being measured. Give -1 point for all L responses, +1 for R responses, and 0 if both hands are used. Score is algebraic sum of points, a negative score indicating left handedness and a positive score right handedness. The strength of dominance is indicated by the number. Estimated norms: 5 yrs. 5-7; 6 yrs. 6-7; 7 yrs. 7-8.

(Taken from A. J. Ayres, Perceptual-Motor Test Battery, 1964)

VIII. Imitation of Movement

Age: All school age children.

Materials: None.

The primary observation in the present task is the promptness and sureness of the child's response. Does he move immediately and with certainty to the next position or does he need to make experimental movement of one or both arms to determine either identification of the limb or direc-

tion of movement?

The critical observation therefore occurs immediately after the new position is presented by the examiner. At this point the examiner's attention cannot be diverted or he will miss the critical observation. For this reason it is highly desirable that the examiner memorize the order of the seventeen positions so that his entire attention can be directed toward observation of the child's response. For handy reference, a wall chart can be constructed and displayed behind the child but facing the examiner. Such a chart can provide clues to aid the examiner during the task presentations. (See Appendix for positions chart)

Procedures: Instruct the child to stand facing you at a distance of about two feet. Allow enough room so the child can move his arms freely when they are fully extended. Say to the child: "I am going to move my arms (demonstrate several positions) and I want you to move your arms just like I do. Are you ready?" (Be sure child understands the directions.) The examiner then moves through each of the seventeen arm positions in order, waiting for the child's response at each position.

Scoring: Performance ratings are based on overall performance rather than response to any one position.

4. If the child performs promptly, consistently, and surely on all patterns. Score 4 only if he parallels the pattern so that his movements are an exact duplicate of the examiner's.
3. If the child performs promptly, consistently, and surely, but mirrors the examiner's movements.
2. If the child shows hesitation or a lack of certainty.
1. If the child makes more than one error. If there is abortive movement in several patterns.

Record the rating of child's performance in the Summary Chart.

(Taken from The Purdue Perceptual-Motor Survey, Dr. Eugene G. Roach and Dr. Newell C. Kephart)

IX. Crossing Midline of Body

Examiner and child sit facing each other. Ex says:

I AM GOING TO POINT TO EITHER MY EYE OR MY EAR. YOU DO THE SAME THING I DO. IF I TOUCH THIS EAR (Ex touches his own R ear with his R hand) YOU TOUCH THIS EAR. (Ex touches child's L ear.) IF I POINT TO THIS EYE (Ex touches his own face just below R eye) YOU POINT TO THIS EYE (Ex touches child's L face just below L eye). IF I TOUCH THIS EAR (Ex touches his own L ear with his L hand) YOU TOUCH THIS EAR (Ex touches child's R ear). IF I POINT TO THIS EYE (Ex touches his own face just below L eye) YOU POINT TO THIS EYE (Ex touches child's face just below R eye). IF I USE THIS HAND (Ex holds up R) YOU USE THIS ONE (Ex touches child's L hand). IF I USE THIS ONE (Ex holds up L) YOU USE THIS ONE (Ex touches child's R hand). WE WILL PRACTICE FIRST FOR YOU TO LEARN HOW.

As practice, Ex points quickly to ear or eye in sequence of first four items on protocol sheet, viz., R hand touches R ear; R hand touches L eye; L hand touches R eye; L hand touches L ear. Between each gesture the hand is brought back to the lap. Ex helps child imitate Ex, explaining and moving child's hand appropriately if he needs assistance. Since this test measures a "tendency" rather than ability, it is important that the child not know that he is being tested for the inclination to avoid crossing the midline of his body. Such knowledge would invalidate the test response. A limitation of this test lies in the opportunity for a sophisticated child to perform cognitively rather than perceptually, thus scoring higher than his actual functioning warrants. After the trial items, no further help is given child except to remind him to put his hand in lap after each item. The items are arranged in a pattern to help Ex to remember how to execute the movements without constant referral to the protocol sheet. One complete pattern consists of 8 items. This pattern is replicated twice. After going through one pattern of 4 items as a trial, Ex says: NOW LET'S SEE HOW QUICKLY YOU CAN DO IT. Ex points quickly to his own ear or eye in sequence given. Child is given no further help in executing items except to be reminded, if necessary, to put his hand in his lap after each item. It is essential that Ex assume positions rapidly. If child

touches correct side of face with correct hand, 2 points are given. The place on the side of his face that he touches is not important, as this is not a test of praxis but of crossing the midline of the body with the hand. If child starts to use incorrect hand but changes to correct hand before the incorrect one touches his face, 1 point is given. If child uses correct hand and starts to point to wrong side of face but changes to correct side before he touches his face on the wrong side, 1 point is given. If child uses the wrong hand to touch the correct side of his face or touches the wrong side of his face with the correct hand, even though he may immediately correct himself, 0 points are given. The difference between a response deserving of 1 point versus 0 points is that, in the former instance, the error is corrected before the hand touches the face; in the latter case, the hand touches the face, even though momentarily. Occasionally a child will make a slight movement of one hand as preparation to move it to his face. If the hand does not leave the lap during this movement it is not considered to have initiated a response. An incorrect hand must be raised from the lap but not touch the face before corrected for a score of 1. Half of the items involve crossing the midline to the opposite side of the face and half involve touching the same side of the face. All items, regardless of whether crossing the body's midline is involved, are scored 2 for a correct, 1 for a wrong but corrected response, and 0 for incorrect responses. Occasionally a child will give an exact rather than a mirror image response. For example, he will point to his left eye or ear with his left hand in response to Ex's pointing to his left eye or ear with his left hand. If the response was initiated by child's left hand the score is 2, for child was correct in his response of not crossing the midline. If child had started with his right hand and then changed to the left hand before touching his face, the score would be 1, for he started incorrectly

but then corrected to a non-crossed response. Similarly, if child points to his right ear or eye with his left hand in response to Ex's pointing to his right ear or eye with his left hand, the score would be 2, for, again, it is the crossing or not crossing the midline which is under test.

The objective in scoring is to give credit for crossing the midline without penalizing for poor motor planning. To do this requires giving credit for crossing the midline in an incorrect response. This is accomplished through the method of totaling the scores. All ipsilateral (same) item scores are put in ovals on the protocol sheet; all contralateral (opposite) scores are recorded in rectangles. The total of all points in the ovals is subtracted from 24 and the remainder added to the total of scores placed in rectangles. The result is the score for the test. Standard scores are found in Tables 7 through 11 in the Southern California Perceptual Motor Test Manual.

X. Stereognosis (The sense by which form of objects is perceived)

A box or sack full of all the articles should be kept together. The articles should be simple. (See equipment list for specific items) Some children will not tolerate a blindfold, therefore, other means will have to be used to occlude vision. Select each item separately and have the child name each one as you place it back in the container. Then ask him to name each object as you place it in his hand, with child's vision occluded. Of course, some children will not understand or cooperate and results may be invalid or unobtainable. If at all feasible, an attempt should be made to complete all the items. Test both hands. For the hemiplegics, the examiner may have to fold the child's hand around it for him. Make a check for each item that is correctly identified. Again record comments if applicable.

XI. Right-Left Discrimination

Child and Ex sit in chairs facing each other. After gaining child's attention, Ex says to child: SHOW ME YOUR RIGHT HAND. —emphasis on "right." Immediately upon completion of the command, Ex starts counting seconds (1001, 1002, etc.) inaudibly to himself while watching child's response. If child holds up, presents, or in any other way indicates his right hand within 3 seconds after the command is made, he is scored 2. If he indicates the right hand after 3 seconds but before 10 seconds, he is scored 1. If he first indicates the left hand but then changes it to the right hand, the score is based on the time when the right hand was indicated. Usually changes from the incorrect to the correct hand are not made within 3 seconds, but should it occur, the score for the item is 2. If the change is made from the incorrect to the correct choice after 3 seconds but before 10 seconds, the score is 1. The remainder of the items are scored accordingly.

When presenting items 3 and 9, Ex holds a pencil in both of his hands which rest on his knees. Enough of the erasure end of the pencil extends for easy grasp by child. When items 4 and 10 are given, Ex holds both hands on knees with palms up to receive pencil. When administering item 5, Ex holds pencil with his right hand one foot in front of the tip of child's left shoulder. For item 8 Ex holds the pencil with his left hand in front of child's right shoulder. Child should not touch the pencil. Ex should avoid letting child see score or otherwise learn whether his response is correct or not. If command must be repeated, the score for item cannot exceed 1. Timing for the item is from end of first command. If child says he does not know the answer he is requested to guess. Items are scored 2, 1, 0 according to accuracy and quickness of response. The test score is the total points for the 10 items. (Standard scores - Tables 7 through 11 in Southern California Perceptual Motor Test Manual)

Equipment needed for testing

General: chair for child and examiner, evaluation form, pencils, and pens.

- I. Gross-motor
 - Tricycle
 - 1 mat
 - stairs
- II. Balance (SBO, SBC)
 - stopwatch
 - blindfold
- III. Upper Extremities
 - bright toy
 - blocks
 - ball
 - round block and container with round hole
- IV. Body Identification
 - None
- V. Auditory
 - bell
- VI. Occular Pursuit
 - chart
 - bell on a string
- VII. Eye Dominance, Hand Dominance
 - Kaleidoscope telescope
 - ring tube
 - toy gun with sight piece of cardboard with hole cut in it
 - cone
- VIII. Imitiation of Movement
 - chart with postures, in view of examiner
- IX. Crossing Midline of Body
 - None
- X. Stereognosis
 - blindfold or shield
 - sack or box containing:
 - ball crayon
 - table knife block
 - fork penny
 - spoon cup

XI. Right-Left Discrimination

pencil

Program Planning Form

After testing has been completed and the examiner has compared the results with the Alpern-Boll Developmental Skill Age Inventory Scores, recommendations and activity planning can begin.

The examiner now has a basis for planning appropriate activities which will help the child improve his already acquired skills and will help him acquire new, useful skills.

In setting up programs for individuals or groups it is helpful to the instructor to plan the entire program on paper.

Program outline: Sometimes the program is too long for the allotted time; sometimes there is not enough planned. If the instructor plans the activities with estimated time allowance, this problem can be alleviated somewhat. Over-planning (planning more activities than can be used) is sometimes necessary, if the group is known for its inconsistency in attendance and performance.

Objectives: Objectives for each activity should be stated simply and briefly. After the program has been carried out, the instructor can evaluate whether or not the objectives were accomplished, realistic, and/or challenging.

Equipment needed: Listing of equipment needed for each activity helps the aides and volunteers prepare and set-up in advance for the program. It also frees the instructor from having to do excess preparation work.

Aides and Volunteers: The planning form also provides a space for the number of volunteers or aides expected or needed for the particular program. Certain groups of children will need more supervision for some activities and the supervisor or instructor for the program must plan ahead in order

to make the program run as smoothly as possible.

(See Appendix, page vi, for planning form)

GROSS-MOTOR REMEDIATION AND TRAINING

After assessment is completed and performance scores are compared with scores from the Alpern-Boll Inventory, programs will be outlined. Each child will most likely have areas of deficits different and similar to other children. Therefore, remediation can be done in small groups as well as individually. Activities will be selected from training programs suggested by Ayres, Kephart, Valett, Frostig and others. They will be selected and adapted according to the needs of the group or individual. Programs can also be implemented by teachers in the classroom and gym classes. Progress reports should be kept for each session by the remediator.

The gross-motor training programs will be coordinated with the fine-motor program.

PART II
FINE-MOTOR ASSESSMENT

RATIONALE:

As can be inferred from their performances in both gross and fine motor tasks, many TMR children have faulty or undeveloped concepts of their own physical identity, hence, inadequate concepts of their relation to their environment along dimensions of mass, space and time. Carried a step further, these conditions can impair conceptualization of the relationships of objects in the environment to each other.

Proceeding from the idea that concepts are built from perceptual data, it is our concern here to train children to obtain meaningful information from the constant impingement of the environment on their sensory input systems, to integrate this information, to give it motoric expression, and to monitor the motoric expression for cues to modify subsequent performance.

Perhaps it should be noted that in this discussion raw sense data is not equivalent to perceptual data. A given sense organ input system is understood only as a subsystem under a perceptual system. The difference lies in a quality of search, awareness or selective attention to meaningful elements in the sense data such as variants or invariants, which distinguishes a perceptual system.

Also, it should be considered that the child is simultaneously receiving input in all sensory modalities other than the modality predominating in the task with which we are presenting him, and his response will be a response to this total field.

The theoretical lines between percepts and associations and between associations and concepts are variously represented in the literature. The labeling of different perceptual-motor systems is here very closely

correlated with the Valett classification of perceptual-motor basic learning abilities, since selected Valett programs constitute the major guidelines for remedial programming. Any theoretical differences are not reflected in the indicated remedial proposals.

The areas being assessed are selected as "survival" areas rather than a sampling of all the possibilities of combinations of reception and expression. Several areas which might be expected to be found in such a checklist are omitted because they are included in the gross motor and sensory-motor integration assessment.

The items contained in this measure are grouped into four levels, each level corresponding roughly with a mental age as ascribed by established authorities in the literature of the evaluation of children. (Gesell, Binet, Sheridan, Alpern-Boll, etc.)

DEFINITIONS OF PERCEPTUAL-MOTOR SYSTEMS IN CHECKLIST:

VISUAL

1. Visual Discrimination - The ability to differentiate forms, and symbols in one's environment. Implications for programming: opportunities to point out, indicate and comment on the details and differences perceived in the visual field. Valett 29.

2. Visual Memory - The ability to recall accurately prior visual experiences. Implications for programming: Training in recall through pointing, matching, verbal description from memory. Valett 31.

3, 4., Visual Fine-Motor Coordination - The ability to coordinate fine muscles such as those required in eye-hand tasks. Implications for programming: Have pupils trace, imitate precise body movements, cut, manipulate and judge fine physical responses. Valett 33.

5. Visual-Motor Expression of Body Image - The ability to reproduce motorically prior visual localization of body parts. Implications for programming: Practice in portrayal of prior objects or events through gestures or drawings. Valett 32.

6, 7., Visual-Motor Spatial Form Manipulation - The ability to move in space and to manipulate three dimensional materials. Implications for programming: Perception of forms in space and opportunity to practice manipulating objects relative to one another. (Basic to everyday non-verbal performance problems.) Valett 34.

AUDITORY

8. Auditory Sequencing - The ability to recall in correct sequence and detail prior auditory information. Implications for programming: Drill and meaningful practice in identification of sound patterns and sequences. Valett 26.

9. Auditory-Vocal Expression - Ability to respond verbally in a meaningful way to auditory stimuli. Implications for programming: Use of association, inference, judgment, fluency. Valett 25.

10. Auditory-Motor Expression - The ability to understand sounds or spoken words and respond motorically. Implications for programming: Careful listening activities, motor response to verbal stimulation and instructions. Behavioral responses, not verbal replies. Valett 23.

11. Auditory-Visual Discrimination - The ability to understand spoken words and make visual discriminations based on them. Implications for programming: Consistent matching of auditory input with colors, forms, shapes, etc.

In addition to the perceptual systems tested for, the total perceptual motor program for each child should include:

- Visual acuity training
- Auditory acuity training
- Tactual and kinesthetic acuity training
- and some olfactory and gustatory awareness experience.

The visual and auditory acuity training can be done at the visual and auditory stations. The remainder, tactual, kinesthetic, olfactory and gustatory could well be assigned to a single station.

The sand and water table can be considered a tactual kinesthetic station, although other modalities are certainly involved here.

The work bench can be considered a visual fine-motor station.

(Strongly recommended all stations have carpeted floor.)

General Instructions for

Administration, Recording and Scoring

1. If it is available, record child's last Alpern-Boll Communication skill age and last Academic skill age.
2. Begin testing at level suggested by the Communication age for auditory perception, Academic age for visual perception.
3. Completely fill in square if performance satisfies all criteria.
4. If performance does not satisfy all criteria, either write in number of correct responses or indicate by slash mark an acquisition stage where the child evidently understands and can perform at least some of the tasks some of the time.
5. Under Priority Activities list two lowest Auditory and two lowest Visual skill areas and the basal levels where the child should be working so that in the absence of diagnostic recommendations, work may be assigned from appropriately coded activity cards.

1. VISUAL DISCRIMINATION, Form, Shape

LEVEL II THREE HOLE FORM BOARD

ADMINISTRATION: Present the board with the blocks in place. Place the board so that the base of the triangle will be toward the subject. Say, "Watch what I do." Remove the blocks, placing each on the table before its appropriate recess on the side toward child. Then say, "Now put them back into their holes." Allow two trials. Return the blocks to the board for a second trial and repeat the procedure.

Count it a trial when the child has arranged the pieces to his satisfaction as indicated by pushing back the board or looking up at the examiner.

RECORD: Circle correct responses.

SCORE: All three blocks must be placed correctly in one of the two trials.

1. VISUAL DISCRIMINATION, Form, Shape

LEVEL III DISCRIMINATION OF ANIMAL PICTURES

ADMINISTRATION: Superimpose Card A over Card B, arranged so that the rabbit in the lower left corner is framed by the rectangular slit in Card A. Say, "See all of these animals? Let's find another one just like this, up here," pointing first to the rabbit in Card B and then to the rabbit on Card A. Let child practice unassisted, with rabbit. Proceed from left to right in order. R to L for the middle row, and L to R for the top row. Say, "Find me another one just like this one," for each animal.

RECORD: Number correct.

SCORE: 4 correct passes.

1. VISUAL DISCRIMINATION, Form, Shape

LEVEL IV DISCRIMINATION OF FORMS

ADMINISTRATION: Show the card with the ten forms and say, "See all of these things." Place the circle of the duplicated set at "X" and say, "Let's find another one just like this," at the same time passing your finger around the circumference of the circle. Point to circle on card with all forms. "Do you see this one?" pointing to the circle. "Now you find me the other one just like this." Correct an error on the circle by saying, "No, find one just like this," again passing the finger around the outline of the figure. If the child still fails to find the circle, show him. Give no further help. Present the square next, then the triangle, and then the other forms in any random order that differs from the order of their arrangement on the large card.

RECORD: Number correct

SCORE: 8 correct responses to pass item

1. VISUAL DISCRIMINATION, Form, Shape

LEVEL V, Similarities - Differences

ADMINISTRATION: Gain child's attention. Place six cards into two groups according to whether the two figures on them are alike or different. Nod and point to indicate likeness and difference. Then, give child the set of two trial cards and gesture for him to place them. If he does not respond spontaneously, show him where the cards go, demonstrating the likeness or dissimilarity. Hand child the remainder of the Binet series one by one, giving no further help.

RECORD: Number correct

SCORE: 9 correct responses to pass item.

2. VISUAL MEMORY

LEVEL II, Hide Kitty

ADMINISTRATION: Place the boxes in a row about two inches apart. Say, "Look, I'm going to hide the kitty and then see if you can find it again." Make sure that the child is watching and then hide the cat first (a) under the middle box, then (b) under the box at E's right, and then (c) under the box at E's left. Screen the boxes each time and count aloud from 1 to 10 at the rate of 1 per second. Remove the screen, and say, "Now find the kitty." The child's first choice in each trial must be the correct one.

RECORD: Number of correct responses

SCORE: Two correct responses must be given to pass item.

2. VISUAL MEMORY

LEVEL III

ADMINISTRATION: Show card (a) and ask, "What is this?" "Yes, it's a cow." If the child does not name it correctly tell him the name. As this card is being removed, say, before showing card (a), "Now we are going to find it!" Then show card (a) and ask, "Where it is?" If necessary, say, "Show me," or "Put your finger on it."

Show card (b) and, pointing to each object, as, "What is this?" If the child does not name it correctly, tell him. As this card is being removed, say, "Now we are going to find them!" Then show card (b) and ask, "Where are they?" Be careful to avoid naming the objects when you are asking the child to locate them from memory.

RECORD: Number of correct responses

SCORE: One card must be correctly responded to pass item.

Additional enumeration makes the response incorrect.

2. VISUAL MEMORY

LEVEL IV, V, Naming Objects from Memory

Place the automobile, dog, and shoe in a row before the child in the order indicated from his left to his right. Call his attention to each object, asking him to name it. Accept whatever name he gives. If he hesitates, name it for him. Then say, "Now shut your eyes tight so that you can't see them." Screen the test objects from his sight. Remove the dog, placing it randomly among the other six articles which are placed on a sheet of paper also behind the screen. Remove the screen and say, "Open your eyes. Look! Where is it now?"

It is not necessary to be overly insistent that the child close his eyes while the object is being hidden since the screen hides the procedure.

1. Automobile, dog, shoe. 2. Cat, spoon, engine. 3. Doll, scissors, thimble.

RECORD: Number correct

SCORE: 2 correct for Level IV, 3 correct for Level V

3. VISUAL-FINE MOTOR, Copying Forms

Level II DRAWING A VERTICAL LINE

ADMINISTRATION: Give the child a pencil and, drawing a vertical line, say to him, "You make one like this. Make it here."

RECORD: Correct or incorrect performance.

SCORE: Must be correct first trial.

4. VISUAL-FINE MOTOR, Copying Forms

LEVEL III COPYING A CIRCLE

ADMINISTRATION: Arrange the record booklet so that the circle is at child's left. Give the child a pencil and, pointing to the circle in the booklet, say "Make one just like this. Make it right here." Give three trials, repeating the directions for each trial. Do not allow child to trace the model.

RECORD: Number correct.

SCORE: One response must be correct to pass item.

3. VISUAL-FINE MOTOR, Copying Forms

LEVELS IV AND V: COPYING A CROSS AND COPYING A SQUARE

ADMINISTRATION: Give the child a pencil and say, pointing to the cross, (square) in the booklet, "Make one just like this. Make it right here." Give three trials, repeating the directions for each trial. Do not allow child to use part of one cross, (square) as part of another, or to trace the model.

RECORD: Number of correct responses.

SCORE: One response must be correct to pass item.

4. VISUAL-FINE MOTOR, Cutting

LEVEL II, does not tear

LEVEL III, halves paper

ADMINISTRATION: Say, "Look." Place scissors in cutting position and cut $\frac{1}{2}$ inch with wide-opened scissors. Release paper and scissors to child and gesture to continue cutting. Pointing to line say, "Show me how to cut the paper into two peices. Cut right on this line."

RECORD: Pass or fail, unless some unusual performance noted.

SCORE: Level II, or III indications of cutting rather than "chewing" or tearing. Level III, if off center fold, must have as much paper on one side as on the other when finished with task.

4. VISUAL-FINE MOTOR, Cutting

LEVEL IV, cuts curve.

ADMINISTRATION: Give the child test page. Point to curve. Put scissors in initial cutting position between two lines. Release scissors to child with gestures to cut down the middle without touching the sides.

RECORD: Indicate performance on scoring sheet.

SCORE: Passed if neither piece of paper shows black from either line other than intact guide line.

4. VISUAL-FINE MOTOR, Cutting

LEVEL V, cutting squares. Give the child test material and scissors.

ADMINISTRATION: Pointing. "Here is a square. Be as careful as you can and cut it out for me. Try to cut on line and not get off."

RECORD: Only pass or fail.

SCORE: No more than a quarter inch off the line in any direction.

5. VISUAL-FINE MOTOR EXPRESSION OF BODY IMAGE

LEVEL II, Identifying Parts of the Body

ADMINISTRATION: E. points to own hair, child's hair, and finally, dolly's hair. Then E. points to her mouth, child's mouth and presents dolly. If child does not respond spontaneously, demonstrate again with hair.

RECORD: Number of body parts correct in box.

Underscore correct responses.

SCORE: The child must clearly indicate four parts to pass.

5. VISUAL-FINE MOTOR, EXPRESSION OF BODY IMAGE

LEVEL III, IV, V, Draw a Person

ADMINISTRATION: Show child several D-A-P productions and Peabody family stimulus cards. Present him with paper and pencil and if he does not spontaneously start to draw, E. should start drawing on another piece of paper and gesture to child to do same.

RECORD: Any number of points earned below passing.

SCORE: Level III, 1-3 points, Level IV, 4-8 points, Level V, 8-11 points.

1 point for each:

head, hair, eyes, pupil, nose, nostrils, mouth, ears, trunk, clothing, shoulders, arms, fingers, legs, heel.

number of fingers correct
details of fingers correct
opposites of thumb
hand distinct from fingers or arms
arm joint shown
leg joint shown
both chin and forehead shown

Trunk proportional
Arms and legs attached to trunk
Neck outline continuous with head or trunk
Nose and mouth, 2 dimensions
Ear correct, position & proportion
Eye brows, lashes or both
Eyes proportion correct

Proportion: head, not more than $\frac{1}{2}$ or less than $\frac{1}{10}$ of trunk,
arms, thinner slightly longer or equal to trunk,
legs, narrower, not shorter than trunk, feet and legs 2D,
not clubbed, arms and legs 2D.

Coordination: Lines firm, clean junctions. Head outline, developed shape.
Trunk outline, developed shape. Narrowing of arms, legs.
Symmetrical features, features two-dimensional and in proper place.

Clothing: 2 articles not transparent, sleeves and trousers free of transparencies.
4 articles indicated.

6. VISUAL FINE-MOTOR, SPATIAL

LEVEL II BLOCK BUILDING: TOWER

ADMINISTRATION: Place the blocks in confusion before the child and then build a four-block tower out of his reach, saying, "See, what I'm making!"

Then, pushing the rest of the blocks toward the child, say, "You make one like this." "Make yours (pointing) right here." E's tower is left standing while the child is attempting to build another. If E's tower is knocked over it should be rebuilt. Illustrate several times if necessary.

RECORD: Number of blocks in his tower (if any).

SCORE: The child must build a tower of four or more blocks in imitation of E's tower and in response to E's request, not spontaneously either before or later. It is purposeful behavior in which we are interested rather than the spontaneous play activities involving manipulation of material. The tower must stand by itself at four-block stage.

6. VISUAL FINE-MOTOR, SPATIAL

LEVEL III BLOCK BUILDING: BRIDGE

ADMINISTRATION: Place the blocks in confusion before the child and then proceed to build a bridge of three blocks beyond the child's reach, saying, "See if you can make one like this." "Make yours (pointing) right here." E's bridge is left standing. Illustrate several times if necessary.

RECORD: Any kind of structure child produces as a response.

SCORE: The structure may be unsteady, but is counted satisfactory if it stands. The base blocks must not be touching. They must be bridged by a third which rests on both. The response is still scored plus if the child continues to build by adding towers to his bridge.

The bridge must be built in response to E's request and not spontaneously at some other time during the test.

6. VISUAL FINE-MOTOR, SPATIAL

LEVEL IV

E gives child five (5) blocks without comment and then shows appropriate picture in booklet saying, "Now, make your blocks look like this."

RECORD: Indicate any correct configurations on score sheet.

SCORE: Must have exact mirror orientation to pass.

6. VISUAL FINE-MOTOR, SPATIAL

LEVEL V

E makes model design then says to child, "Now make your blocks look like this."

RECORD: Configuration on score sheet.

SCORE: Must be exactly like model to pass.

7. VISUAL FINE-MOTOR, PROBLEM SOLVING

LEVEL II, OPENS BOX

ADMINISTRATION: Box is opened and shut several times while the child is watching. Then the box and cover are placed side by side before him, the cover with the top side up and on the side of the child's preferred hand, then he is instructed "Now _____, shut the box." Several trials may be given.

RECORD: Pass or fail

SCORE: Credit is given if the child shuts the box at least twice.

7. VISUAL FINE-MOTOR, PROBLEM SOLVING

LEVEL III SNAPS, BUTTONS, LACES, ZIPPERS

ADMINISTRATION: Child is presented with frames containing above items. If he does not spontaneously (undo, do) them, he is shown what to do and told, "Now _____, (undo, do) it," after each demonstration.

RECORD: Indicate performance on protocol.

SCORE: Must do all four tasks to pass.

7. VISUAL FINE-MOTOR, PROBLEM SOLVING

LEVEL IV, OPENS INTERIOR DOORS

ADMINISTRATION: If E has had opportunity to observe the child opening an interior door without assistance, he may give credit without further testing. Otherwise, accompany child to door and ask, "Can you open the door for me?" If he does, say "Thank you." If he tries but does not succeed say, "Thank you, you tried." If child appears not to understand task, it can be demonstrated.

REPORT: Pass or fail.

SCORE: Must open door unassisted to pass.

7. VISUAL FINE-MOTOR, PROBLEM SOLVING

LEVEL V, PADLOCK

ADMINISTRATION: Child is given box containing trinket or treat secured by small padlock. He is given key to padlock and told, "Let's see what is in the box. First, unlock this lock." After child unlocks lock he may be given any amount of assistance to remove lock and obtain treat. If he is unable to unlock he is given opportunity to solve any of the remaining problem. After treat has been obtained E says, "Now let's lock it up again. You close the lock." E may assist in putting padlock back on box, but may not assist locking.

RECORD: Indicate performance on protocol.

SCORE: Must both lock and unlock for credit.

LEVELS II, III, IV, V

2 - 8

3 - 1

6 - 1 - 2

6 - 1 - 5 - 8

5 - 2 - 1 - 8 - 6

SCORE: Must pass 1 of 2 trials.

LEVEL II, TELLS NAME

child has volunteered it first. "May _____?"

SCORE: Child must give both names. Nickname is acceptable, but not "baby," etc.

9. AUDITORY, VOCAL EXPRESSION

LEVEL III, TELLS SEX

ADMINISTRATION: "Mary (Jimmy, etc.) are you a boy, or are you a girl?"

RECORD: Pass or fail.

SCORE: Only correct response passes.

9. AUDITORY, VOCAL EXPRESSION

LEVEL IV, FAMILY ANALOGY

ADMINISTRATION: E. "Brother is a boy, sister is a _____."

"Father is a man, mother is a _____."

RECORD: Indicate correct responses on protocol.

SCORE: Must pass both.

9. AUDITORY - VOCAL EXPRESSION

LEVEL V, AGE, ADDRESS

ADMINISTRATION: E. "Tell me, how old are you now?" "How old were you last year?" "How old will you be next year?"

or

"Where do you live? What is your address?"

RECORD: Indicate correct response on protocol.

SCORE: One task set must be answered correctly to pass. Child must respond to address with numbers correct in sequence and proper street identification.

10. AUDITORY, MOTOR EXPRESSION

LEVEL II, BABY, CHAIR, DRINK, WIPE

ADMINISTRATION: Chair is placed before the child and doll seated beside it.

- A. "Put the baby in the chair. Baby wants to sit in the chair."
- B. "Baby wants a drink. Give baby a drink."
- C. "Here is a handkerchief. Wipe the baby's nose."

RECORD: Indicate correct responses on protocol.

SCORE: Two items must be correct to pass Level I.

- A. Scored correct if earnest attempt is made to carry out request.
- B. Scored correct if cup is tipped anywhere from forehead to navel.
- C. Scored correct if child wipes in general vicinity of nose.

10. AUDITORY, MOTOR EXPRESSION

BEST COPY AVAILABLE

LEVEL III, Put on, take off, coat

ADMINISTRATION: E. "Here is a dress-up coat. Let's see how you look in it. First, put it on. Then take it off."

RECORD: Indicate correct responses on protocol.

SCORE: Both requests must be carried out without further direction. Child need not actually button or zip coat before starting to remove it, but coat must be acceptably over shoulders.

10. AUDITORY - MOTOR EXPRESSION

LEVEL IV, THREE COMMISSIONS

ADMINISTRATION: Arrange the setting before beginning the test; that is, see that a chair is available, the door open (or shut), and a box in place, all in plain sight. Have the child accompany you to the center of the room, saying, "Now I want you to do something for me." Make sure that you have the child's attention as you continue the instructions, saying, "Here's a pencil. I want you to put it on the chair; then I want you to shut (open) the door, and then bring me the box which you see over there." Make sure that the child does not start until the instructions have been completed and repeated by saying, "Do you understand? Be sure to get it right. First you put the pencil on the chair, then you shut (open) the door, and then bring me the box." Give no further help. If child asks what to do next say merely, "Go ahead." If the child stops or hesitates it is not permissible to prompt by asking what comes next. (No gestures in this task.)

RECORD: Number of commissions carried out correctly.

SCORE: All three commissions must be executed and in the proper order to pass item.

10. AUDITORY - MOTOR EXPRESSION

LEVEL V. SHOW HOW OLD

ADMINISTRATION: "Remember, I asked you to tell me how old you are? This time, do not tell me, just show me with your fingers how old you are."

RECORD: Any response given with fingers.

SCORE: Must show correct number of fingers. Credit is not lost if child also gives a vocal response. No credit for vocal response alone.

11. AUDITORY - VISUAL COLOR DISCRIMINATION

LEVEL II, matches r y b g

ADMINISTRATION: Fold paper so that first four squares only are visible. Place r y b g blocks in that sequence on these squares. Be sure to have child's attention. Show red block and place it in square before the other red block. Then supply child with other matching blocks, one at a time and not in above sequence. If child does not spontaneously respond repeat demonstration with red block. He may self-correct if no cue is received from E.

RECORD: Correct responses

SCORE: All responses must be correct to pass.

11. AUDITORY - VISUAL COLOR DISCRIMINATION

LEVEL III, identifies 2

ADMINISTRATION: E. "Point to the blue, (yellow, red, green) block."

RECORD: Indicate correct responses on protocol.

SCORE: Must have two correct responses to pass.

LEVELS IV-V

ADMINISTRATION: Unfold remainder of paper and arrange blocks r o y g
b p br. bl. Ask child, "Point to the _____ block," randomly
naming colors but not in above sequence.

RECORD: Correct responses

SCORE: LEVEL IV must give at least five correct responses

LEVEL V must give all eight correct responses

CHECKLIST MATERIALS

inch cubes (12)
2r 2y 2b 2g 1o 1p 1br. 1bl.

Binet kit:
Form Board
Booklets
Memory objects

pencil
scissors

inch cubes (12) uniform color
design blocks

small cardboard box with lid
button board
snapping board
lock board

jointed doll
chair to fit doll
toy cup
handkerchief

coat size 5

SUGGESTED STATIONS

- 1 Auditory Station - predominantly for receptive training
- 1 Auditory Station (adjacent) predominantly for expressive training
- 1 Visual Station - predominantly for receptive training (viewing station)
- 1 Visual-gross motor Station
- 1 Visual fine-motor task Station (2D)
- 1 Visual-motor, spatial manipulation station (3D)
- 1 Color Station
- 1 Tactile - kinesthetic - gustatory-olfactory Station
- 1 Equipped Work Bench
- 1 Sand and Water Table

APPENDIX

MARION COUNTY ASSOCIATION FOR RETARDED CHILDREN

Perceptual Motor Assessment Form

Key: I-independent
H-can do with help
A-attempted
No-unable

Name: _____ Test Date: _____

BD: _____ C.A.: _____

DX: _____ Dominance: _____

Examiner: _____

Test or Activity		Evaluation Date:	1st / /	2nd / /	Comments
I. Gross Motor					
Supine—	Raises head				
Prone—	Raises head				
	Supports self on elbows				
	Drag crawls				
Rolling—	Front to back				
	Back to front				
Sitting—	Ring sitting				
	Long sitting, not falling				
	Side sitting				
	Brings self to sitting position				
Kneeling—	All fours				
	Wt. transfer to hands				
	to knees				
	Reciprocal creeping				
	Knee standing (upright kneeling with hips ext.)				
	Knee walks without falling				
Squatting—	Squats, feet slightly apart				
	Stands up, heels on ground				
Standing—	Keeps balance when pushed				
	Runs				
	Skips				
	Hops—1 foot				
	2 feet				
	Jumps in place				
	distance				

MARION COUNTY ASSOCIATION FOR RETARDED CHILDREN P-M ASSESSMENT FORM

Test or Activity	Evaluation Date: / /	1st / /	2nd / /	Comments
Climbs stairs, alternates feet going up down				
Walks forward				
backward				
sideways				
Rides tricycle				
II. Balance				
(Arms folded against chest) Record # of seconds: Eyes open		R	R	
		L	L	
Eyes closed		R	R	
		L	L	
III. Upper Extremities				
(3 mo.)				
Active arm motion on sight of toy				
(6 mo.)				
Holds object actively				
Reaches out purposefully and touches object				
Grasps in pronation				
Retains object				
Drops object (usually in- voluntarily)				
(9 mo.)				
Transfers objects both ways				
Extended reach and grasp				
Uses finger and thumb to pick up object				
Releases object (with flexed wrist)				
(12 mo.)				
Attempts to stack blocks one on the other (brings over and drops)				
Hits two objects together				
Voluntary release				
Rolls ball imitatively				
Puts round block into round hole				
Hurls ball inaccurately (2 yrs.)				
accurately				
(3 yrs.)				
IV. Body Identif.				
Points to body parts on command (18 mo.)				
Where is your nose?				
" " " mouth?				
" " " eyes?				
" " " ears?				
" " " hair?				
Knows function-body parts				
Tactile defensiveness				

MARION COUNTY ASSOCIATION FOR RETARDED CHILDREN P-M ASSESSMENT FORM

Test or Activity	Evaluation Date:	1st / /	2nd / /	Comments
V. Auditory	Responds to one level command			
VI. Ocular Pursuit (Ayres)	Turns head toward stimulus			
	1. Able to hold eyes on ball without being distracted more than once.			
	2. Both eyes follow ball even close to eye.			
	3. Eyes cross midline without jerking.			
	4. Does not move head (either rotation, forward or backward)			
	5. Pursuits are smooth, fluid and accurate.			
	6. Does not "loss" ball when it changes direction.			
	7. Does not "make faces" such as squinting in effort to follow.			
	8. Does not avoid test with frequent blinking.			
	9. Both eyes find ball easily and quickly after looking away from it.			
	10. Both eyes leave fixation on ball easily to look away on command.			
	TOTAL NUMBER OF CHECKS			

MARION COUNTY ASSOCIATION FOR RETARDED CHILDREN P-M ASSESSMENT FORM

Test or Activity	Evaluation		1st		2nd		Comments
	Date:		/	/	/	/	
VII. Eye & Hand Dominance (Ayres)	Eye	R Hand			Eye	L Hand	
1. Kaleidoscope (which eye)							
2. Look at E through ring of E's							
3. Sight with gun. 8'							
4. Look through cone at E. 3'							
5. Telescope. 5'							
6. S looks through tube at E. 4'							
7. S looks through cone at E. 6'							
8. S looks through 1" hole in card-board. 2'							
TOTAL R EYE							
TOTAL L EYE							
TOTAL R HAND							
TOTAL L HAND							

VIII. Imitation of Movement (Adapted from Kephart)

Moves correct limbs			
Does not make abortive movements			
Not hesitant or uncertain			
Not consistently parallel nor mirror			
Mirrors patterns			
Parallels patterns			
Recognizes errors if told			
Recognizes errors after some delay, not told			
Recognizes errors spontaneously			

XI. Crossing the Midline of Body (Ayres)

Trial: Items 1 thru 4 Score 24 of 40

(L) 1. R hand to R ear	☐	☐	☐	Less total in ovals	24
(LX) 2. R hand to L eye	☐	☐	☐		
(RX) 3. L hand to R eye	☐	☐	☐		
(R) 4. L hand to L ear	☐	☐	☐	Plus CMLX Raw Score (total in rectangles)	CMLX St. Sc.
(RX) 5. L hand to R ear	☐	☐	☐		
(R) 6. L hand to L eye	☐	☐	☐		
(L) 7. R hand to R eye	☐	☐	☐	= CML Raw Score	CML St. Sc.
(LX) 8. R hand to L ear	☐	☐	☐		

MARION COUNTY ASSOCIATION FOR RETARDED CHILDREN P-M ASSESSMENT FORM

Test or Activity	Evaluation Date:	1st / /	2nd / /	Comments
X. Stereognosis: (3½ yrs. and up)				
R	L			
Ball _____	Ball _____			
Knife _____	Knife _____			
Fork _____	Fork _____			
Spoon _____	Spoon _____			
Key _____	Key _____			
Crayon _____	Crayon _____			
Block _____	Block _____			
Penny _____	Penny _____			
Cup _____	Cup _____			
R Number Correct: _____				
L Number Correct: _____				
XI. Right-Left Discrimination (Ayres)				
(Score 2, 1, 0. Three seconds)				
1. Show me your R hand				
2. Touch your L ear				
3. Take this pencil with your R hand				
4. Now put it in my R hand				
5. Is this pencil on your R side or on your L side (L)				
6. Touch your R eye				
7. Show me your L foot				
8. Is this pencil on your R side or on your L side (R)				
9. Take this pencil with your L hand				
10. Now put it in my L hand				
Raw Score				
Standard Score				

MARION COUNTY ASSOCIATION FOR RETARDED CHILDREN P-M ASSESSMENT FORM

Problem Areas:

Recommendations:

Perceptual Motor Program Planning Form

Date: _____ Class: _____

Time: _____ # of children: _____

Program or Activities: _____

Objectives: 1.

2.

3.

4.

5.

Equipment needed:

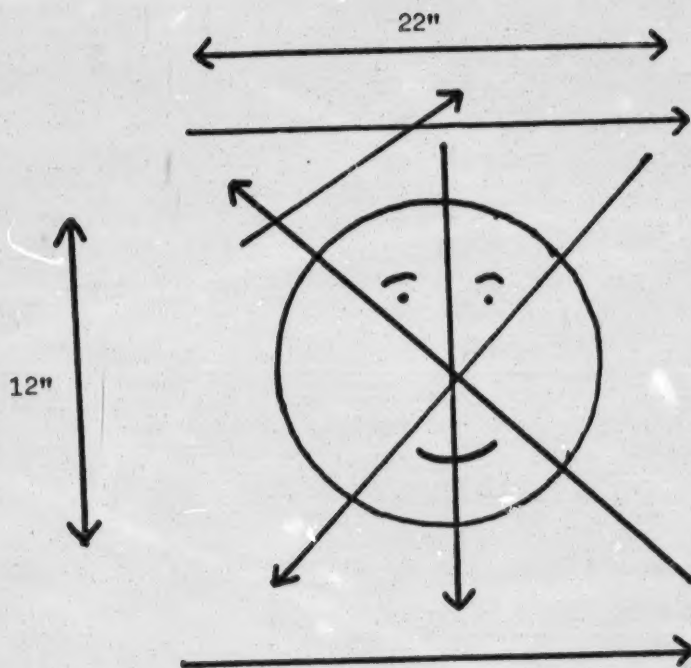
Aides and Volunteers:

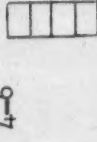
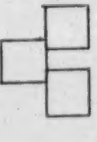
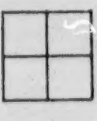
Program Outline:

Position Chart



Occular Pursuit Chart



SYSTEMS:	Level II	Level III	Level IV	Level V
VISUAL				
Discrimination				
1. Forms, shapes	☐  ☐  ☐ 	☐ matches animals 4	☐ matches shapes 8	☐ Sim.-Diff. 9
2. MEMORY	☐ hide kitty 2	☐ picture memory 1	☐ objects fr. memory 2	☐ objects fr. memory
FINE MOTOR:				
3. Copying forms	☐	☐ 	☐ 	☐ 
4. Cutting	☐ does not tear	☐ halves paper	☐ 	☐ 
5. Expression of Body Image	☐ pts. to body parts on dolly 4-6	☐ D A P 1-3	☐ D A P 4-7	☐ D A P 8-11
6. Spatial	☐ 	☐ 	☐ 	☐ 
7. Problem Solving	☐ opens box	☐ snaps, button undoes	☐ opens door	☐ opens, locks, lock
AUDITORY				
8. Sequencing	☐ 2 digits	☐ 3 digits	☐ 4 digits	☐ 5 digits
9. Vocal expression	☐ name	☐ boy? girl?	☐ sentence completion: _____	☐ how old? where live?
10. Motor expression	☐ dolly chair drink wipe	☐ put on, take off coat	☐ 3 commissions	☐ show how old with fingers
11. Visual Color Discrimination	☐ matches r y b g	☐ identifies r y b g	☐ identifies 5-6 r o y g b p br. bl.	☐ identifies 8 r o y g b p br. bl.

	VISUAL	LEVEL	AUDITORY	LEVEL
Priority Activities:	_____	_____	_____	_____
	_____	_____	_____	_____

SUGGESTED EQUIPMENT LIST FOR PERCEPTUAL-MOTOR

TRAINING PROGRAM (GROSS-MOTOR)

Automats (velcro fastenings) (12)
Voit PG Utility Balls (4-10")
Metal Frame Reversible Blackboard (2)
*Balance Board (2)
*Learn-a-Steps (2)
*Rocking Boat (2)
First Step Gym (2)
Adjustable Height Trapezoidal Tables (4)
Rubber Kindergarten Balls (6-5", 6", 7")
Bobo (6)
Set of Hoops (2)
Quoit Set (2)
Chairs (12-10", 12")
Tambourines (12)
Unibongo Drums (12)
Wrist Bells (12)
Portable Classroom Phonograph (1)
Tricycles (3-20", 16"; 6-12")
Hoppity-Hops (3)
Stopwatch (3)
Krazy Kars (3)
Large Beachballs (6-62")
Moveable Mirror (full-length) (2)
Moveable Partitions (4)
Stationary Wall Mirror (2)
*Scooter Boards (12)
*Rhythm Sticks (12 pairs)
*Tin Can Stilts (6 pairs)
*Cardboard Boxes
*Clorox Bottles
*Downey Bottles
*Carpet samples
*Material Scraps
*Stereognosis Kits (4)
*Inner Tubes
*Sandbags
*Beanbags (2-3 dozen, various sizes)
*Parachute (2)
Texture Balls
Sponge Balls (Nerf Ball)
*Barrels (4)

*Items that can be made or collected at home.

SUGGESTED EQUIPMENT FOR VISUAL-MOTOR SPATIAL STATION

1 36" x 45" Table with six chairs (assorted heights)

Beads, small and large cubes, spheres

Bead laces

one-inch solid color cubes

Table Blocks

Parquetry blocks

Tinker Toys

Clay

Geometric inserts

Pegboards and pegs

Chinese checkers

Checkers

Dominoes

Jacks

Montessori graded cylinder sets
pink tower
long stairs
broad stairs

Button

Snap

Lacing - - - - - Boards

Locking

Wood shelving for above

SUGGESTED MATERIALS FOR COLOR STATION

1 36" x 42" Table and six chairs (assorted heights)

Color flashlight

Color paddles

Paints (Tempera, finger paint)

Assorted size and colored papers

Paint brushes, containers

Felt pens (colored)

Crayons

Clean-up facilities

Colored one-inch wood cubes

Wall paper sample books

Fabric sample books

Paste

Scissors

Wood shelving for above

SUGGESTED EQUIPMENT FOR WORK BENCH

Bench at least 30" x 48" with vise

3 Stools

Auger, bits

Clamps

Hammers

Coping saw, blades

Hand drill, bits

Screwdrivers

Wood rasp

Wood scraps

Nuts, bolts, nails

Wood storage for above

SUGGESTED EQUIPMENT FOR

AUDIO STATION

(Predominantly for receptive training)

1 30" x 48" Table divided with 4 carrels

4 Chairs (Assorted heights)

1 Listening Post

4 jacks

4 good quality earphone sets

1 Quality Record Player with earphone jack

Records, e.g. Bowmar:

5 senses

self-image

sights and sounds

feeling and perceiving

1 Record Player and records children can be allowed to operate with supervision.

1 Tape Recorder for staff

1 Tape Recorder selected children can be allowed to operate with supervision.

$\frac{1}{2}$ doz. Tapes children can play

$\frac{1}{2}$ doz. Tapes for staff use only

Wood shelving for above

AUDIO STATION

(Predominantly for Expressive Training)
Peabody Level "K" Kit

Sound cylinders

Chromatic bells

Xylophone

Cymbals

Jingle Bells

Rhythm Sticks

Tambourine

Buzzer Board

Drums, Mallets

Animal sound boxes

Music Boxes

Floor pillows or carpet squares

Wood Shelving for above.

SUGGESTED EQUIPMENT FOR VIEWING STATIONS

1 36" x 45" Table and 6 Chairs (assorted heights)

1 17" screen TV

1 Overhead Projector

1 8 mm Film Projector

1 8 mm Film Viewer

8 mm Tapes

1 Filmstrip projector

Film strips

Magnifying glasses (hand, tripod)

Kaleidoscope

Teleidoscope

Pen lights

Flashlights (1 with colors)

Records with luminous dots

Race track with cars

Wood Shelving for above

SUGGESTED EQUIPMENT FOR VISUAL-GROSS MOTOR STATION

- 1 Full Length Mirror
- 1 Plexiglass screen (4' x 4')
mounted in wood frame
- 1 Four foot chalkboard, preferably magnetic
(portable to make room divider)

magnetic shapes and letters, numbers
- 1 Mounted free-swinging ball
for ocular pursuit

Ping-Pong table

Ping-Pong Set

Large floor blocks

Large Parquetry floor blocks

Wood Storage for above

SUGGESTED EQUIPMENT FOR VISUAL FINE-MOTOR STATION (2D)

1 36" x 48" Table with six chairs (assorted heights)

Continental press visual motor skills material

Erie program

Frostig program

Barsch program

Etcha-Sketch, Trace-a-graph

Acetate sheets $8\frac{1}{2}$ x $11\frac{1}{2}$ good quality

Tracing paper

Clip Boards

Felt pens

Pencils

Scissors (assorted)

Scissor-programmed paper

Wood shelving for above

SUGGESTED MATERIALS FOR T-K-G-O

STATION

1 30" x 48" Table and six chairs (assorted heights)

1 Sand and water table

Sieves, scoops, paddles, funnels, etc.

"Mystery" boxes, screens to obscure hands. 3D shapes for discrimination

Touch ABC Boards

Kinesthetic numbers and alphabets

Form Boards, stencils

Weight sets

Wall paper sample books

Assorted cloth samples

Assorted sandpaper weight samples

Assorted surface samples from environment

Smell Discrimination sets

Taste Discrimination sets

Wood shelving for above